

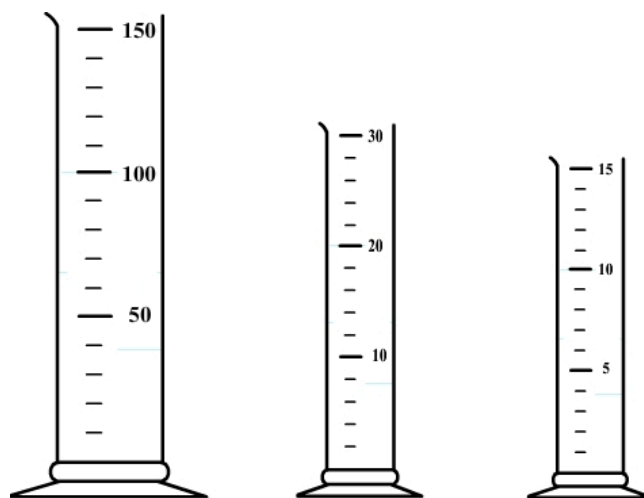
NAME: _____

ELLIS

Simple Measurement: Volume

Volume is how much space and object occupies.

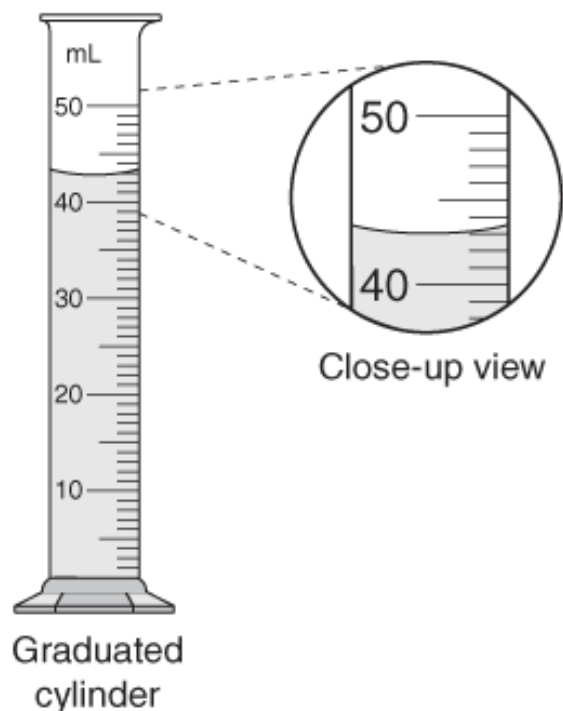
There are many different ways to measure volume. In class students will look at one way to measure the volume of liquid using three different size graduated cylinders.



Notice that for three different sized graduated cylinders, the markings represent a much different increase in volume. That means that the digit of estimation will be different depending on which size cylinder is being used. When using graduated cylinders, volume is measure in the unit milliliters (mL).

Graduated Cylinder:

To take an accurate volume one must have their eye level at the top of the liquid, then take a measurement by reading the number/markings at the bottom of the meniscus. The meniscus is the U-shape that the liquid makes at the surface.



Here is an example of how to take a measurement with a digit of estimation using a graduated cylinder.

First note that every one mark on the graduated cylinder in this case is representing an increase in volume of 1 mL.

Place the cylinder on a flat surface and then bring your eye level to the top of the liquid. The bottom of the meniscus or the U-shape created at the surface of the liquid looks to be very close to, but slightly under 43 mL. Therefore we can be sure that there are 42 mL and our estimated digit would indicate that the volume is very close to 43.

The volume of the liquid is 42.9 mL

NAME: _____

Station 1 10 mL graduated cylinder:

Red Water _____

Volume _____

Station 2 50 mL graduated cylinder:

Yellow Water

Volume _____

Station 3 100 mL graduated cylinder:

Blue Water

Volume _____

Now, what if you were asked how volume these three liquids occupy in liters? In ounces?

Using the information learned in class yesterday convert the three volumes of water from:

	milliliters (mL) to ounces (oz)
milliliters (mL) to liters (L)	1 oz = 29.57 mL
	1 mL = 0.034 oz

Station 1:

Station 1:

Station 2:

Station 2:

Station 3:

Station 3: